

IN THE SPECIFICATION

Please amend the paragraph beginning at page 27, line 6, as shown:

An array 290 of optical transmitters 210-213 (see ~~figurers~~ figure 2) convert each multicarrier return electronic current signal carrying the higher frequency carrier signals carrying return information signal in conductors 205-208 into a corresponding multicarrier return light beam carrying the same higher frequency carrier signals carrying the same return information signals in respective output optical paths 215-218. Each return light beam in optical paths 214-218 has a different respective optical wavelength with sufficient spacing between the wavelengths for subsequently separating the light beam using a DWDM after they are combined into the same common optical fiber. Preferably, the wavelength of the light beams in paths 215-219 are between 1220 and 1360 nm or between 1480 and 1620 nm.

Please amend the paragraph beginning at page 27, line 15, as shown:

The optical up-converter 180 may also ~~includes~~ include DWDM 220 which combines ~~[[a]]~~ all the optical signals (light beams) in optical paths 215-218 into a single common optical path 221. Output coupler (222) connects common fiber (223) to output optical path (221). Controller 225 controls the conversion of frequencies in electronic up-converters 201-204 and controls the wavelength of laser transmitters 210-~~214~~213. In addition, (not shown) the controller may control the connections between the optical receivers 182-185 and electronic up-converters 201-204 and/or between electronic up-converters 201-204 and laser transmitters 210-~~214~~213 in order to provide flexibility and rerouting around failed components such as failed laser transmitters. The controller may control various portions of the receivers and transmitters as described below with reference to figures 2 and 3.

Please amend the paragraph beginning at page 32, line 29, as shown:

HFCN 362 is connected by a single optical fiber 361 to fiber-hub 336. The single fiber is used for the analog broadcast optical signals, forward digital signals, and return digital signals. The fiber is attached to a WDM in the fiber-hub which combines the analog and forward digital signals and separates the return digital signal from fiber 361. Then the optical return signal is routed from the WDM to an optical ~~up-converted~~ up-converter and ~~up-converter~~ up-converted as described in relation to figure 1.

Please amend the paragraph beginning at page 36, line 23, as shown:

Figure 8 illustrates a converting fiber-hub 600 which is similar to the DWDM fiber-hub of figure 7, but has no DWDM, so that, separate fibers 602-603, extending between the converting fiber node and the head-end (or a DWDM fiber node), are required for each respective HCU 604-605. HCUs ~~606-608~~ 604-605 are similar to HCU 536 of figure 7 and needs no further description. Optical fiber 606 carries forward analog broadcast signals which are separated into multiple signals for respective HCUs by splitter 607. One or more optical fibers 608-609 extend between the converting fiber node and respective HFCNs.